

The arrowroot is prepared in the same manner as that from *Canna edulis* and has a good reputation, being of excellent quality. The missions have raised sums of money by getting the natives to collect and manufacture it. The natives did not use it in any way before the white men came and even now do not manufacture arrowroot unless under white supervision. They can get plenty of other food without going to so much trouble. I sent seeds of this plant to the California Botanic Gardens.



E. H. Wilson



JOURNAL

OF THE

ARNOLD ARBORETUM

VOLUME XI

OCTOBER, 1930

NUMBER 4

ERNEST HENRY WILSON

ALFRED REHDER

With portrait

THE sudden death on October 15 of Ernest Henry Wilson, Keeper of the Arnold Arboretum, in an automobile accident, was a great shock to his associates and friends, taking him in the prime of his life from the work he loved so well and in which he was interested with all his heart.

Ernest Henry Wilson was born at Chipping Campden in Gloucestershire, England, on February 15, 1876, the eldest son of Henry and Annie (Curtis) Wilson. After leaving school he entered the nurseries of Messrs. Hewill at Solihull, Warwickshire, and in 1892 was recommended to the Curator of the Birmingham Botanical Gardens as a promising young gardener. He accepted a position in these gardens and notwithstanding the long hours of work he studied at the same time in the Technical School in Birmingham which offered excellent facilities for the study of botany, and did so well that he won the Queen's prize in this subject at the examination held by the Board of Education. In January 1897 he entered the Royal Botanic Garden at Kew where he soon succeeded in winning recognition for his work in the garden as in the lecture room. On the advice of his friends and induced by his love of botany he left Kew and entered in October 1898 the Royal College of Science at South Kensington with the intention of becoming a teacher of botany.

About this time the nursery firm of Veitch & Sons asked the director of Kew Gardens to recommend a suitable man to send to China to collect seeds and living plants. The choice fell on Wilson and he left England in April 1899 for China by the way of Boston and San Francisco. This was his first visit to Boston and to the Arnold Arboretum. One of the chief objects of his journey was the introduction of *Davidia involucrata* and he had instructions to see Dr. A. Henry who was at that time in Szemao, Yunnan, and obtain information where to find this tree which Dr. Henry had seen in Hupeh nearly 20 years before. Arrived at Hongkong he had to sail to Haiphong in Tonkin as the best way to reach Szemao. After much delay and with great difficulties owing to political disturbances¹ Wilson finally succeeded in reaching Szemao. After Dr.

¹ A vivid description of this episode is found in Wilson's *Aristocrats of the Garden*, pp. 275-294.

Henry had given him the desired information and all possible advice and assistance, he returned to Hongkong and went from there early in 1900 to Shanghai and up the Yangtze River to Ichang. There he found some of Dr. Henry's men who guided him to the place where Dr. Henry had seen the *Davidia* tree, but to Wilson's dismay all he found was the stump of the tree which had been cut down a few years previously. Wilson then decided to collect all the interesting plants of the region he could and in traveling around for this purpose he found in another locality trees of *Davidia* in full bloom, from which he collected in autumn a rich harvest of seed. With Ichang as his headquarters he collected in Hupeh, during 1900 and 1901, seeds and living plants of a great number of new ornamental plants and also a large amount of herbarium material.

In April 1902 he returned to England and on June 8 married Ellen Ganderston of Edgbaston, Warwickshire. Mrs. Wilson, quiet and unassuming, found her highest pleasure in making the happy atmosphere of the home in which he loved to write of his adventures in far away lands. They had one daughter, Muriel Primrose, who, was married last year to Mr. George Slate, a member of the staff of the New York Agricultural Experiment Station at Geneva, N. Y.

He had been so successful in his work that Messrs. Veitch & Sons decided to send him again to China, and in January 1903 he started on a second expedition. He arrived in Shanghai on March 22, and started at once for northern Szechuan. He made Kiatingfu his headquarters and first went to Tachienlu and later north to Sungpan where he found among other things *Meconopsis punicea*. The year 1904 also he spent in the exploration of western Szechuan and returned in March 1905 to England, where he attended for some time to his introductions in the Veitchian nurseries at Coombe Wood and later went as temporary assistant to the Herbarium at Kew to assist in the sorting and identification of his herbarium collections. He had sent in during the expeditions about 2000 numbers of seeds and plants and about 5000 numbers of herbarium specimens of which many proved new to science. In January 1906 he accepted a position as botanical assistant at the Imperial Institute in London.

The success of Wilson as a collector of seeds and living plants and of herbarium specimens attracted the attention of Professor C. S. Sargent and he secured Wilson's services for another exploring expedition to China this time in behalf of the Arnold Arboretum. In December 1906 Wilson came to the Arnold Arboretum and left on the last of the month for China via San Francisco. He arrived in Shanghai on Feb. 4th and proceeded at once to Ichang. He made an excursion in April to the southwest, where at an altitude of 7000 ft. the trees were still bare and snow was lying in the crevices. On this trip he discovered *Pinus Bungeana* wild in Central China. During the rest of the year he explored western Hupeh in different directions with Ichang as the base where he also spent

the winter. In May of 1908 he traveled west and using Kiating as the base, explored western Szechuan in different directions finding the Min valley, Mt. Wa and Mt. Omei particularly interesting and profitable. At the end of the year he left Szechuan and went east again and leaving China towards the end of April 1909 arrived in England on May 15. He stayed in London until September when he returned to the Arnold Arboretum.

As the Conifers in western China did not bear cones in the autumn of 1908 and as it seemed important to secure cones and seeds of these trees, Wilson went to China for the fourth time in April 1910. He traveled by the Trans-Siberian railway via Moscow and Peking and arrived at Ichang by the end of May. As the men who had traveled with him on his former expeditions had been already notified, he was able to start without delay for western Szechuan and reached Chengtu on July 27. At the beginning of August he set out for Sungpan and after having collected there and having made arrangements for digging the bulbs of the Regal Lily in October, he started on his return trip to Chengtu. When following a narrow trail along a steep slope Wilson's party was surprised by a rock slide and Wilson was hit by a rock which broke his right leg in two places below the knee. He was still three days from Chengtu and with his leg temporarily bandaged with splints improvised from the legs of his camera tripod he had to be carried to Chengtu where he was cared for by doctors of the Friends' Presbyterian Mission, but infection had set in and at the end of six weeks as there were no signs of the bones uniting the question of the amputation of the leg was raised. The doctors, however, finally succeeded in staying the infection and after three months Wilson was able to walk on crutches.¹ Soon after he started on his return voyage to America where he arrived in March 1911. After spending a few weeks in a Boston hospital, where he had his right leg, which was nearly an inch shorter reset and fitted with a special boot, he was able to walk freely again. In 1910 the Conifers in western Szechuan had fruited freely and were collected as were the Lily bulbs by Wilson's trained collectors, so that notwithstanding the unfortunate accident the object of the expedition was realized.

During the two Arboretum expeditions Wilson collected about 65,000 specimens representing 4700 numbers and secured 1593 lots of seed and 168 lots of plants and cuttings, also about 850 excellent photographs of plants, general views of vegetation, and of other objects of interest.

From March 1911 to the end of 1913 he remained at the Arnold Arboretum sorting and classifying his collections and preparing jointly with the writer an account of his collections in China edited in three volumes by C. S. Sargent under the title "*Plantae Wilsonianae*."

In 1914 he went to Japan and spent February and March in southern Japan paying special attention to Cherries; in one garden, where 80

¹ See Wilson, *Plant hunting* II. 150-153.

garden forms were grown, he collected herbarium material of 63 named forms. From April to June he collected in Central Japan and in July and August in Hondo and Saghalin. In autumn he returned to central Japan and the last two months of the year he spent on the island of Shikoku. After having collected about 2000 numbers with many duplicates, taken about 600 photographs and sent home a large collection of Japanese cherries and seeds he returned to the Arnold Arboretum in January 1915.

From January 1915 to the end of 1916 he assisted again, after having worked and arranged his Japanese collections, in the preparation of the "Plantae Wilsonianae," the last part of which was issued in January 1917.

In January 1917 he started on his sixth voyage to the Far East and explored first in February and March the Liukiu and in April the Bonin Islands. In May he left for Korea and made several excursions with Dr. Nakai, the government botanist of Korea, and during 1917 visited almost all the provinces and also the southern island of Quelpaert and the small Dagelet Island whose flora is closely related to that of Japan. After having spent the last months of the year in the southern provinces he returned in January 1918 to Japan to proceed at once to Formosa where he arrived on January 22; he visited Mt. Arisan where *Taiwania cryptomerioides* the tallest tree of Eastern Asia grows and also ascended Mt. Morrison the highest peak of Formosa (13072 ft.). In April he left the island and returned to Japan where he visited the city of Kurume on Kyushu Island to see a collection of 250 named kinds of Kurume Azaleas; this collection was started by Motozo Sakamoto about 100 years ago and is now in the hands of K. Akashi; the parent stock came from Mt. Kirishima.¹ In June he made a second trip to Korea where he stayed until September 28, when he returned to Japan to visit Formosa once more. About the middle of December he left Formosa and after a short sojourn in Japan returned to the United States arriving in Boston on March 17, 1919. From this last expedition he brought back about 30,000 specimens representing 3268 numbers and 700 photographs, also many seeds and living plants. Some of the most interesting plants he introduced during this expedition are *Taiwania cryptomerioides*, *Pinus luchuensis*, *Juniperus taxifolia* and *Cunninghamia Konishii*.

In April 1919 Wilson was appointed Assistant Director of the Arnold Arboretum and in July 1920 started on a tour to Australia, New Zealand, India and Central and South Africa. He first went to England whence he embarked in September for Australia where he visited the Botanic Gardens at Perth, Adelaide, Melbourne, Sydney and Brisbane and made collecting tours into the native forests. February and March of 1921 he spent in New Zealand and Tasmania, then returned to Australia which country he left in June for Singapore. From Singapore he went to Penang, Rangoon and Calcutta and during August made a tour through the northern and north-western forests, visiting the botanic gardens at

¹ See Wilson, Plant hunting, II. 232-244.

Lucknow, Saharampur, Lahore, Simla and the Forestry College at Dehra Dun. In September he made a tour to Sikkim and Assam and in October went to Bombay and from there to Ceylon and later to the Nilghiri Hills visiting Ootacamund and Coimbatore. On Nov. 4 he sailed from Bombay for Mombasa in East Africa whence he proceeded at once to Nairobi in British East Africa; from there he visited Kenya and the forest where *Juniperus procera* grows. In the beginning of 1922 he went to Portuguese East Africa and thence to Victoria Falls in Rhodesia. On February 2 he reached Pretoria and from there traveled to Durban and Capetown. From Capetown he sailed on April 7 for London in June he paid a visit to Edinburgh and in July made a trip to France. On August 15 he sailed from Liverpool for the United States to take up again his duties as Assistant Director of the Arnold Arboretum. During this last tour he took 522 photographs and collected a large number of herbarium specimens in all the countries he visited. He fully realized the chief object of this tour which was to bring about closer relations between the Arboretum and other botanical institutions all over the world and to establish friendly relations with individuals interested in botany, horticulture and forestry. In April 1927 after the death of the Director, Professor C. S. Sargent, he was appointed Keeper of the Arnold Arboretum.

On October 15, 1930, Dr. and Mrs. Wilson were returning from a visit to their daughter. When near Worcester, Mass., the automobile which Dr. Wilson was driving skidded on a road made slippery by fallen leaves and swerving across the side walk crashed through a wooden fence and dropped over a steep embankment to a field 40 ft. below the level of the road. Mrs. Wilson was dead when extricated and Dr. Wilson died on the way to the hospital without regaining consciousness.

Wilson's chief contribution to horticulture and botany lies in his exploration of China where he spent most of his time between 1899 and 1911. His long sojourn in this country and his familiarity with it earned for him the epithet "Chinese" Wilson. He made four journeys to China and in all six to the Far East, the last two to the different countries of the Japanese Empire. He was a born plant collector; endowed with a strong physique, robust health, indomitable will power and a deep love of plants he succeeded in collecting and introducing into cultivation a greater number of plants than any other collector. He knew how to handle his men and never had any serious trouble in all his expeditions in the Far East. He introduced more than a thousand species previously unknown to cultivation and collected about 16,000 numbers of herbarium specimens, with numerous duplicates, so that now his specimens are found in all important herbaria throughout the world and his plants have spread to all the gardens of temperate and subtropical regions. It is not feasible to enumerate here all his introductions and only a few of the more important can be mentioned, as: *Abelia Schumannii* Rehd., *Abies Fargesii* Franch., *Acer Davidii* Franch., *Actinidia chinensis* Planch.,

Aesculus Wilsonii Rehd., *Ampelopsis megalophylla* Diels & Gilg, *Berberis Sargentiana* Schneid., *B. triacanthophora* Fedde, *Buddleia Davidii* var. *magnifica* Rehd. & Wils., *Buxus microphylla* var. *koreana* Rehd. & Wils., *Catalpa Fargesii* Bur., *Celastrus angulata* Maxim., *Cercis racemosa* Oliv., *Citrus ichangensis* Swingle, *Cladrastis Wilsonii* Takeda, *Clematis montana* var. *rubens* Ktze., *Corylopsis Veitchiana* Bean, *Cotoneaster apiculata* Rehd. & Wils., *Cunninghamia Konishii* Hay., *Deutzia longifolia* var. *Veitchii* Rehd., *Dipteronia sinensis* Oliv., *Evonymus Aquifolium* Loes. & Rehd., *Forsythia ovata* Nakai, *Fagus lucida* Rehd. & Wils., *Fortunearia sinensis* Rehd. & Wils., *Gaultheria Veitchiana* Craib, *Hamamelis mollis* Oliv., *Hydrangea Sargentiana* Rehd., *Ilex Pernyi* Franch., *Jasminum primulinum* Hemsl., *Kolkwitzia amabilis* Graebn., *Liquidambar formosana* Hance, *Liriodendron chinense* Sarg., *Lonicera tragophylla* Hemsl., *Magnolia Delavayi* Franch., *Malus theifera* Rehd., *Neillia sinensis* Oliv., *Photinia Davidsoniae* Rehd. & Wils., *Picea asperata* Mast., *Pieris taiwanensis* Hay., *Populus lasiocarpa* Oliv., *Prunus Dielsiana* Koehne and many varieties of *P. serrulata* Lindl. and *P. Lannesiana* Carr., *Pyrus Calleryana* Dcne., *Rubus lasiostylus* Focke, *Rosa Moyesii* Hemsl. & Wils., *Salix magnifica* Hemsl., *Sargentodoxa cuneata* Rehd. & Wils., *Schizophragma integrifolium* Oliv., *Sinofranchetia chinensis* Hemsl., *Sinowilsonia Henryi* Hemsl., *Sorbaria arborea* Schneid., *Sorbus Sargentiana* Koehne, *Spiraea Veitchii* Hemsl., *Staphylea holocarpa* Hemsl., *Stewartia koreana* Nakai, *Styrax Wilsonii* Rehd., *Sycopsis sinensis* Oliv., *Syringa reflexa* Schneid., *Taiwania cryptomerioides* Hay., *Thea cuspidata* Kochs, *Tilia Oliveri* Szysz., *Tsuga yunnanensis* Mast., *Vaccinium praestans* Lamb., *Viburnum rhytidophyllum* Hemsl., *Vitis Davidii* Foëx, *Aconitum Wilsoni* Stapf, *Astilbe Davidii* Henry, *Corydalis thalict trifolia* Franch., *Lilium regale* Wils., *Meconopsis integrifolia* Franch., *Primula Veitchii* Duthie, *Rodgersia aesculifolia* Batal., *Senecio tanguticus* Maxim., *Thalictrum dipterocarpum* Franch., *Rehmannia angulata* Hemsl., and others.

During his travels in different parts of the world Wilson paid much attention to forest conditions and published valuable contributions and suggestions relating to the forest problems of several countries, as Korea (A summary report forestry and afforestation of Chosen. 1919), East Africa (Indigenous forest trees of Kenya. 1922), South Africa and Australia (Northern trees in southern lands. 1923). He also rendered a great service to silviculture through the introduction of important forest trees into cultivation.

In his position as Keeper of the Arnold Arboretum he carried on the work of Professor Sargent and succeeded well in maintaining its steady progress and development. Besides this work he took an active interest in the Massachusetts Horticultural Society of which he was trustee and member of several important committees, and was advisory editor of the Society's publication "Horticulture." He also was much sought for as a lecturer by horticultural societies in different parts of the country

and particularly he liked to lecture on the Arnold Arboretum, the subject closest to his heart. Notwithstanding all these activities he found time for literary work. He was a frequent contributor to horticultural and botanical periodicals and published a number of important horticultural and botanical books; he wrote of his experiences in China in "A Naturalist in Western China," "Plant Hunting" and "China, Mother of Gardens"; he dealt with ornamental plants, chiefly trees and shrubs, in "Aristocrats of the Garden," "More Aristocrats of the Garden," "Aristocrats of the Trees," and "America's Greatest Garden" which is a description of the Arnold Arboretum. More strictly botanical are "Cherries of Japan," "The Conifers and Taxads of Japan," "A monograph of Azaleas (with A. Rehder)" and "The Lilies of Eastern Asia." Wilson's books are well written. In his botanical publications he covers his ground completely with painstaking accuracy, knowing the plants he is dealing with not only from the study of ample herbarium material but also as they grow in their native habitat; in his more popular books he writes in a vivid and entertaining style imparting his masterly knowledge of the plants in a way that keeps the interest of the reader alive from cover to cover. Not the least valuable part of his books are the reproductions of the excellent photographs he took in all parts of the world.

Many honors were bestowed upon Wilson. On November 6, 1906 he received the Veitchian medal in recognition of his services in horticulture and in 1913 the Victoria medal of honor in horticulture. He also received the Geoffroy St. Hilaire Gold Medal, the George Robert White Medal, the Medal of the Horticultural Society of New York and the Centennial Gold Medal of the Massachusetts Horticultural Society. In 1916 the honorary degree of A.M. was conferred on him by Harvard University and in 1930 the honorary degree of Sc.D. by Trinity College of Hartford, Conn. He was elected fellow of the American Academy of Arts and Sciences, was an honorary member of the Rhododendron Society, the American Horticultural Society and also was a member of other scientific and horticultural societies. In recognition of his services to Chinese botany a new genus of Hamamelidaceae from China, *Sinowilsonia*, was named in his honor. Besides this, about 60 species and varieties of Chinese plants bear his name of which some may be cited here: *Aconitum Wilsonii* Stapf, *Aesculus Wilsonii* Rehd., *Aralia Wilsonii* Harms, *Cladrastis Wilsonii* Takeda, *Corydalis Wilsonii* N. E. Br., *Daphne Wilsonii* Rehd., *Deutzia Wilsonii* Rehd., *Evonymus Wilsonii* Sprague, *Ilex Wilsonii* Loes., *Iris Wilsonii* C. H. Wright, *Magnolia Wilsonii* Rehd., *Populus Wilsonii* Schneid., *Rubus Wilsonii* Duthie, *Salix Wilsonii* Schneid., *Sophora Wilsonii* Craib, *Sorbus Wilsoniana* Koehne, *Spiraea Wilsonii* Rehd., *Styrax Wilsonii* Rehd., *Ulmus Wilsoniana* Schneid., *Viburnum Wilsonii* Rehd.

Although Wilson was taken from us in the full vigor of his life, he had